









TO FIND A VACCINE TO PREVENT HIV









WHAT IS A VACCINE?

A vaccine helps your body learn how to fight infections. An HIV vaccine would help your body protect itself from HIV infection. No major epidemic caused by a virus has been stopped without a vaccine. Right now, there is no vaccine to prevent HIV, and there is still no cure for AIDS.

What you should know about preventive HIV vaccine research

- HIV vaccine research is essential in the fight against HIV/AIDS, along with prevention, treatment, and care.
- The best long-term hope for controlling the AIDS epidemic is a vaccine to prevent HIV. The vaccine must be safe, effective, and affordable.
- You can't get HIV from any vaccine being tested in people.
- The safety of research participants is always most important.
- All personal information about participants in HIV vaccine research is kept private. No one will know you are involved in a clinical trial unless you tell them.
- One vaccine tested in Thailand was able to cut down HIV infections by about one third. This gives us hope that we can one day find a vaccine that works well for everyone.

Why do we need a vaccine to prevent HIV?

- Every 9 ½ minutes, someone in the U.S. is infected with HIV.
- There is no cure for HIV. Once people are infected, most of them eventually need to stay on treatment for the rest of their lives.
- A vaccine to prevent HIV could help save millions of lives worldwide and billions of dollars per year in HIV treatment costs.

How safe are the HIV vaccines being tested?

- All clinical trials involve some risks, but there is no risk of getting HIV from preventive vaccines tested in people.
- Preventive HIV vaccines tested in people do not use weakened or dead versions of HIV.
- HIV vaccines contain genes or proteins that look like those found in the real virus. They do not have all the parts of the HIV virus needed to cause infection.
 The vaccines cannot give people HIV.
- Like many vaccines, the HIV vaccines being tested might cause side effects such as soreness from the shot, a mild fever, and/or body aches. These side effects tend to go away quickly on their own.

HOW IS HIV AFFECTING COMMUNITIES IN THE U.S.?

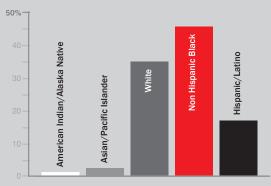
NEW HIV INFECTIONS BY SEX

(2007 CDC HIV/AIDS SURVEILLANCE REPORT)



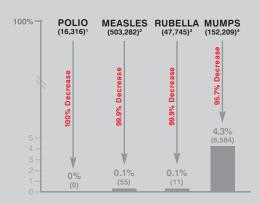
PERCENTAGE OF NEW HIV INFECTIONS BY RACE/ETHNICITY

(2007 CDC HIV/AIDS SURVEILLANCE REPORT)



VACCINES GREATLY REDUCE DISEASES

Vaccines have played a key role in wiping out diseases like diphtheria, smallpox, and polio. They have also helped to greatly reduce several other diseases. For example, vaccines helped reduce the number of cases of mumps from 152,209 in 1968 to 6,584 in 2006—that's a 95.7 percent decrease.



- Baseline 20th Century Annual Cases in U.S.
- 2006 Cases in U.S.
- Percent Decrease

Source: MMWR 2007:56(33):851-64

- 1. Average number of reported cases per year (1951-1954)
- 2. Average number of reported cases per year (1958-1962)
- 3. Average number of reported cases per year (1966-1968)
- 4. Number of reported cases in 1968

WHAT IS A CLINICAL TRIAL? A clinical trial is a research study in people to see how well a vaccine or medicine works and to make sure it is safe. Testing is done first with a small number of participants, then with hundreds, and finally with thousands of participants.

How do you know if the research is being done right?

- Clinical trial researchers have to follow strict ethical and legal standards, and most clinical research must follow federal laws that protect study participants.
- All of the possible known risks are fully described as part of the informed consent process. All participants must acknowledge that they understand these risks and then sign a consent form before they can join the clinical trial.
- A clinical trial follows a carefully designed protocol, a study plan that details what researchers will do.
- A group of independent experts regularly reviews the clinical trial to oversee patient safety and make sure the study follows the protocol.
- Side effects are reported to the study investigator, who takes appropriate medical action, if needed. Side effects are also reported to study reviewers who monitor the study closely for participant safety.
- · Participants can leave the study at any time.

What are we doing to find an HIV vaccine?

- Many agencies are working to develop a safe and effective HIV vaccine. They include U.S. government agencies such as the National Institutes of Health (NIH), foreign governments, universities, foundations, nonprofit organizations, and biotech and drug companies.
- It takes many participants to do HIV vaccine research.
 Already more than 28,000 volunteers have participated in research supported by the National Institute of Allergy and Infectious Diseases (NIAID), a part of the NIH.

YOU SUPPORT HIV VACCINE CAN SUPPORT

- 1 LEARN the facts at www.bethegeneration.nih.gov.
- 2 TALK to friends and family about the need for an HIV vaccine.
- **3 JOIN** a community advisory board or other education efforts in your area.
- 4 ENCOURAGE vaccine research participants and/or become one yourself.



WHERE CAN YOU LEARN MORE?

www.bethegeneration.nih.gov



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